CONSTRUCTION MATERIALS

Course Code	Course title	No. of Periods per week	Total No. of Periods	Marks for Formative Assessment	Marks for Summative Assessment
C-305	Construction Materials	03	45	20	80

Model Paper for Unit Test-I:

State Board of Technical Education and Training,
A.P.Diploma in Civil Engineering (DCE)
Third Semester: C-305 CONSTRUCTION MATERIALS

Time: 90 Minutes **Unit Test –I** **Maximum Marks: 40** **PART- A** **16 Marks**

Instructions:

(i) Answer all questions

(ii) First question carries FOUR marks, each question of remaining carries THREE marks.

1. (a) Un-stratified rocks are not layered or stratified (True/False) (CO1)

   (b) The colour of good bricks should be brown (True/False) (CO2)

   (c)The increase in the volume of sand in the presence of moisture is known as_____(CO2)

   (d) The process of making of cement was first developed by_____ (CO4)

2. List any properties of granite stone (CO1)

3. State the classification of bricks as per ISI (CO2)

4. State any three important functions of sand. (CO3)

5. Write any three usages of stone ware pipes. (CO3)

PART- B **3 x 8 = 24 Marks**

Instructions:

(i) Answer all questions

(ii) Each question carries EIGHT marks

(iii) Answer should be comprehensive and the criterion for valuation is the content but notthe length of the answer.

6. (A) State the physical classification of rocks.(CO1)

   (OR)

   (B) Explain any eight characteristics of a good building stone. (CO1)

7. (A) State any eight qualities of good bricks (CO2)

   (OR)

   (B) Explain Water absorption test and compressive strength test on bricks (CO2)

8. (A) State any eight uses of cement. (CO4)

   (OR)

   (B) Describe the method of manufacture of cement by dry process. (CO4)

Model Paper for Unit Test-II:

State Board of Technical Education and Training,
A.P.Diploma in Civil Engineering (DCE)
Third Semester: C-305 CONSTRUCTION MATERIALS

Time: 90 Minutes **Unit Test –II** **Maximum Marks: 40**

PART- A **16 Marks**

Instructions:

(i) Answer all questions

(ii) First question carries FOUR marks, each question of remaining carries THREE marks.

1. (a) The soundness test on cement is done by using Lechatlier apparatus (True/False)(CO4)
   (b) The process by which the moisture in the timber is reduced is known as_____oftimber. (CO5)
   (c) The moisture content in a well seasoned timber is a.) 5% b.) 10% c.) 15% d.) 20% (CO5)
   (d) _____glass is used in the manufacture of superior quality apparatus (CO5)
2. State any six types of cements used in the construction industry. (CO4)
3. Define 'Water cement ratio' and state the effect of increased water cement ratio on concrete. (CO4)
4. Define the term 'Mortar' and state different types of mortars. (CO4)
5. State any three characteristics of good timber. (CO5)

PART- B **3 x 8 = 24 Marks**

Instructions:

(i) Answer all questions

(ii) Each question carries EIGHT marks

(iii) Answer should be comprehensive and the criterion for valuation is the content but notthe length of the answer.

6. (A) State different method of mixing of concrete and Describe the method of mixing of concreteby machine mixing. (CO4)

(OR)

(B) Explain the following types of glasses (CO5)

7. (A) Define admixture. Write short notes about (a) plasticizers and (b) super plasticizers (CO4)

(OR)

(B) State any two uses of the following : (a) Veneer (b) Plywood (c) Straw board (d) Laminatedboard(CO5)

8. (A) Explain 'Ready-mix concrete' and state any four advantages of ready mix concrete. (CO4)

(OR)

(B) i.) list the uses of glass
ii.) list the merits of plastic (CO5)

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Model Paper for end examination:

MODEL PAPER – BOARD DIPLOMA EXAMINATION, (C23)DCE-THIRD SEMESTER EXAMINATION

CONSTRUCTION MATERIALS (C-305)

TIME : 3 Hours] **[Total Marks : 80**

PART – A 10 x 3 = 30 marks

Instructions : 1) Answer All Questions

2) Each question carries three marks

3) Answers should be brief and straight to the point and shall not exceedfive simple sentences.

1. Define the terms rock and stone. (CO1)
2. Name the classification of bricks as per ISI. (CO2)
3. What is meant by bulkage allowance of sand? (CO3)
4. State the uses of porcelain? (CO4)
5. State the classification of cement. (CO4)
6. What is the difference between ordinary cement & portaland cement? (CO4)
7. What are the functions of mortar? (CO4)
8. Describe any two methods of curing of concrete. (CO4)
9. State any three advantages of float glass. (CO5)
10. List the merits and demerits of asbestos products (CO5)

PART – B **5 x 10 = 50 marks**

Instructions:

i) Answer any FIVE questions

ii) Each question carries TEN marks.

iii) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. (i) Explain the purpose of dressing of stones . (CO1)
    (ii) List characteristics of good building stone

12. (A) Describe the stages of drying and burning of bricks in the brick manufacturingprocess.

    (CO2)

13. (A) Briefly explain the characteristics of good sand. (CO3)
14. Briefly explain the characteristics of good tiles. (CO3)
15. Explain the properties of Ordinary Portland cement. (CO4)
16. Explain different steps involves in concreting. (CO4)
17. Differentiate normal strength concrete and high strength concrete.(CO4)
18. a) Name the common verities of timber used in civil engineering works.

    b) State the object of seasoning of timber. (CO5)